

How France Handles Her Forests—Her Way Just the Opposite of Ours.

By WILLIAM B. GREELEY, United States Forester.



A lumberjack sergeant of the Twentieth engineers remarked that the lumber business in France seemed to be concerned more with growing trees than cutting them into boards. That in a nutshell is the difference between the timberland owner in France and the timber baron of America. The conception of a forest as land producing crop after crop of wood extends from the intensively managed public forests of France down to the peasant who owns half a hectare of poplars in a swampy bottom.

To us in the United States, who are wont to think of forestry as possible only for the nation or state, it is of interest to know that two-thirds of the wonderfully conserved forests of France are owned by private citizens. The technical care of these 16 million acres of private forests does not differ, in essential respects, from that given to the state and communal properties.

The lumber manufacturing industry has grown up upon and adapted itself to a system of forest management which permits but small cuttings at any one place in any one year or series of years. Cases are rare when the well being and permanence of the forest are sacrificed to the requirements of a manufacturing enterprise—an exact opposite of the situation so common in the United States where the manufacturer owns the timber and has denuded one forest region after another in order to supply his large, stationary mills to their maximum capacity. While this relation is largely a result rather than a cause of the economic status of private forestry in France, it indicates the industrial adjustments which will become necessary in America as our emphasis shifts from supplying saw-mills to growing timber.

The situation of France, today is a striking warning that the United States can ill-afford the national loss of idle land. Public agencies doubtless must assume the greater part of the immediate task of growing timber on our idle cut-over land. But publicly owned forests cannot do all of it in the United States any more than in France. Our national policy should aim definitely and unequivocally at the practice of forestry by private owners as rapidly as that can be brought about by better methods of taxing timberland, by the co-operation and educational help of state and federal agencies, and by the recognition, on an equitable basis, of the obligations carried by forest ownership.

"But, Believe Me, We Are Not as Poor as Most of Our Rich Neighbors."

A MOTHER'S LETTER, in New York Telegram.

You girls may think you are poor (I'm sorry you can't have those new coats you want, particularly since you've never complained), but you are rich, rich, compared to millionaire Brown's daughter, who, was recently married and lives in the next block. She's a sweet girl, too, if she'd ever had anything to bring out what there is in her, but she's always been pampered and now she is pining for this thing and that—always the thing she hasn't or something some one else has done that she hasn't.

Girls, I know we're poor, in a sense, but, believe me, we are not as poor as most of our rich neighbors. Think what genuine pleasure any of us feel when we receive an unexpected gift; an unexpected pleasure jaunt, and, my! what capacity for enjoyment we all possess.

There was a time in my life when I rebelled because I knew that I could not do for my children what some of my friends were doing for theirs. I believe we have the best of it now. I firmly believe you will be happier and better women for the fact that the cost has always had to be seriously considered.

Love and Fighting Are the Concave and Convex Sides of the Same Thing.

By DEAN C. R. BROWN, Yale Divinity School.

I have long been a prize fight fan. I have never actually seen a pugilistic encounter. I am free to confess that I have been interested in the sport ever since the days of Sullivan and Kilrain.

Whenever there is a big pugilistic encounter I read the account of it the next morning with genuine interest, for I believe the man who denies the natural lure of a spirited conflict, whether between two men or two companies of men or two great armies, is in some manner lacking.

The spirit of love and the fighting instinct are the concave and convex sides of the same thing.

There is nothing soft or spineless in true Christianity, for Christian wrath is wrath with a moral basis and that is the kind we should exercise. The evils of this world never will be overcome with less than a stiff and aggressive fight and the fighting spirit has its value in that obvious fact.

Where red blood courses there is always the instinct to fight well; it is inherent. A good fight therefore interests me.

Grave Danger of America Is Its Irresponsible, Undisciplined Youth.

By MAJ. GEN. CLARENCE R. EDWARDS, U. S. A.

One of the gravest dangers menacing the country today is its irresponsible, undisciplined youth.

I believe I have a panacea for it. In fact, I know I have. There must be universal training for citizenship, the object to be the benefit of the individual. Their standard would be one of manhood; the peace standard of the dollar would be eliminated.

What are the essential characteristics of a good American citizen? A sound body and a sound mind, an appreciation of the dignity of labor and the happiness of industry; mastery and control of self; appreciation of the benefits of our institutions and our obligations to them, and the point of view of one's fellow man.

The army and navy should be made great schools for men and manhood, with the employment of the best elements, with the elimination of men unfit and methods unsuitable for the training of our youth.

Flora Klickman, English Editor—The followers of this cult (free verse) advocate the abolition of all law and order; each goes gayly on his own way, writing whatsoever he pleases, no matter how crude, or banal, or incoherent, or loathsome; lines any and every length, unlimited full stops, or none at all; just what is in the brain—and what a state of brain it reveals!

Representative John Q. Tilson of Connecticut—We of this day and time shall prove ourselves unfaithful servants if without an earnest effort to prevent it we permit ourselves to drift back into the same old fool's paradise in which the war found us.

EFFICIENCY OF ILLINOIS FARMS COMPARED



Corn Harvester in Operation—Where Conditions Are Favorable the Corn Binder Increases Efficiency of Man Labor About 50 Per Cent.

(Prepared by the United States Department of Agriculture.)

The relative efficiency of plows of different sizes, the value of the tractor compared with horses, the saving effected by corn binders, hay loaders, and numerous other implements, and other facts bearing on farm management are discussed by specialists of the office of farm management. In a bulletin recently issued. The publication discusses in detail the standard day's work in central Illinois; that is, the amount of work that the 900 farmers included in the investigation ordinarily do in that part of the work day devoted to a given farm operation, such as the number of acres plowed with a given equipment. In some instances the rate of work is given in the bulletin in number of minutes per acre, as in loading and unloading hay, or hauling and spreading manure.

From the figures published one may get a good idea of the rate at which different farm operations are done in the parts of the corn belt in question. For example, it is shown that one man does from 20 to 80 per cent more with the 28-inch row-bottom gang plow than with the one-bottom 16-inch plow. Figures are given for spring and fall plowing, harrowing, planting, cultivating, harvesting, husking, seeding, unloading ear corn, unloading oats, loading and unloading hay, and hauling and spreading manure. The bulletin is entitled "The Standard Day's Work in Central Illinois." Copies may be had by addressing the United States department of agriculture, Washington, D. C.

The farms represented by this inquiry are fairly typical of those throughout the middle western states, since the average crop area is 167.4 acres and an average of 32.1 acres is never planted to crops. Corn is the principal product, at least one-half of the crop area being devoted to it, and the oat crop is second in importance. The ground cultivated in most instances is level, and so represents easier working conditions than rolling or rugged country.

The average time spent in the field, exclusive of the time used in going to and returning from the field, at morning, noon, and night, is reported by these men as ten hours and ten minutes per day devoted to spring field work and corn cultivation; nine hours and 55 minutes for haying and grain harvesting; nine hours and 30 minutes for fall plowing and preparing ground; and nine hours and 20 minutes for corn harvest.

Important Facts Emphasized. Among the significant facts brought out by this inquiry may be mentioned the following:

Under conditions where the use of a two-row corn cultivator is practicable, this machine enables one man on these farms to cover nearly twice as much ground per day as with a one-row cultivator. Three horses are most commonly used on the two-row cultivator and the addition of a fourth horse apparently increases but little the amount of ground covered per day.

These farmers find that the use of a corn binder increases the efficiency of man labor 50 per cent over that achieved when cutting and shocking by hand.

Eighty bushels was an average day's work on these farms for one man when husking corn from the standing stalk by hand.

The use of a portable elevator reduces the time required to unload grain into the bin by about 75 per cent.

The use of a hay loader reduces by about 25 per cent the time required to put on a load of hay. The amount of labor required for unloading into the mow is only a little more than half as great when a hayfork is used as when the work is done by hand.

The men in this territory who use manure spreaders haul and spread a given amount of manure in less than half the time required by men who haul to wagons and spread by hand. A large majority of the men reporting broadcast their small grain, using endgate seeders attached to the box of an ordinary wagon. Only about 25 per cent of the farmers reporting own grain drills.

The bulletin analyzes each field operation from the standpoint of man-labor requirements, horse-labor requirements, size of machine, etc. The manner in which the data on plowing have been summarized is typical of the way in which several subjects are treated. About 80 per cent of the farmers reported the use of sulky plows, about 80 per cent stated that they use horse-drawn gang plows, and 14 per cent reported the use of tractors for plowing.

16-Inch Sulky Plows Popular. A large majority of the farmers use 16-inch sulky plows, nearly all of them with three horses in the spring. Three acres is an average day's work for this outfit. For the comparatively few farmers using 14-inch sulky plows with three horses in spring, plowing about three acres is an average day's work. While theoretically the 10-inch plow should cover about 15 per cent more ground in the same length of

time, this apparently has not been found true in practice.

Four-Horse Teams Preferred.

The greater number of four-horse teams and even some five-horse teams on 14-inch sulky plows for fall plowing is accounted for by the fact that plowing in the fall is usually about one inch deeper than in the spring, and also by the fact that the ground is generally dry and hard to turn. On an average, outfits of the same size cover about a half acre less per day in the fall than in the spring, due not only to the more difficult conditions mentioned above, but also to the fact that the time spent in the field is about two-thirds of an hour less per day in the fall.

As is the case in spring plowing, the 14-inch plow seems to cover practically as much ground per day as the 16-inch size, provided both are drawn by the same number of horses. The addition of the fourth horse increases the efficiency of the unit by about 10 per cent and the addition of the fifth horse to the 16-inch plow results in a similar increase. Excepting under favorable conditions, a sulky plow seems to be somewhat of an overload for three horses of the size and type used on these farms.

Many Gang Plows Used.

Over 450 men reported using horse-drawn gang plows on their farms. About 80 per cent of these plows have 14-inch bottoms. Most of the remaining plows have 12-inch bottoms. Some plows with 13-inch bottoms were reported, but the number was so small that no figures on their performance are given. Over three-fourths of the men who use gang plows also reported the use of sulky plows.

A comparison of an average day's work for 16-inch sulky plows and 28-inch gang plows shows that so far as horse labor is concerned the gang plow drawn by four horses is the most efficient unit in both spring and fall. In the spring this outfit covers one and a quarter acres per day per horse, while both the sulky plow drawn by three horses and the gang plow drawn by five horses cover one acre per day per horse. The gang plow drawn by six horses covers but nine-tenths of an acre per horse.

In the fall four horses with the gang plow cover 1.02 acres per horse, while three horses on the sulky plow and five horses on the gang plow cover .86 acre and .91 acre per horse, respectively. Four horses on the sulky plow and six horses on the gang plow cover .72 and .78 acre per horse, respectively. However, the gang is evidently a heavy load for four horses in the fall, excepting under favorable conditions. The 28-inch gang plow is a somewhat heavier load for six horses, the most popularized team used in the fall, than is the 16-inch sulky for four horses, but is a lighter load than the 16-inch sulky for three horses.

As far as man labor is concerned, the gang plow drawn by six horses is, of course, the most efficient unit both in the spring and fall, but when horse labor as well as man labor is considered, it is seen that the advantage of this largest unit is somewhat lessened.

TIMOTHY HAY IS NUTRITIOUS

Contains About Three Times as Much Digestible Nutrients as There Is in Corn Silage.

In 100 pounds of timothy hay there are 48.8 pounds of digestible nutrients, or nearly three times as much as there is in corn silage. Corn silage, being a succulent feed and more palatable is, on the whole, more easily digested. Specialists have calculated that one ton of timothy hay is equivalent to about two and a half tons of corn silage, says Hord's Dairyman. Putting it in another way, when timothy hay is worth \$10 a ton corn silage is worth \$4.

Best Potato Soils.

Potatoes do best on loose soils, well supplied with plantfood. Clover or alfalfa sod makes a very desirable location, and ample amount of manure or other fertilizer should be supplied.

Demand for Poultry Products.

The more good chickens and well-flavored eggs the market absorbs, the more good chickens and well-flavored eggs will be in demand.

Picnics Are Favored.

Farmers' picnics are recommended by the United States department of agriculture as strengtheners of co-operation.

Know Your Dairy Herd.

Testing your cows enables you to know your herd. "By their works shall ye know them" and you may slaughter accordingly.

Big Poultry Factors.

Cleanliness and the destruction of lice and mites are the big factors in building up a nice paying little business.

VOLCANOE AWAKE TO LIFE

Mount Katmai, in Alaska, Especially, Shows Signs of Preparation for Destructive Outburst.

Affording an awe-compelling spectacle of nature in a sullen mood and awakening memories of the ghastly details of the eruption of eight years ago, Mount Katmai, most powerful and restless of North American volcanoes, is again in violent activity, according to Capt. Charles A. Glasscock and Purser Gary Bach of the steamer Admiral Watson, which reached port recently from southwestern Alaska, says the Seattle Post-Intelligencer.

A sable pall of smoke from the funnel of the belching crater broods over the northern sky for a radius of 40 or 50 miles by day, while freightful tongues of flame can be seen by vessels a score of miles at sea at night, according to the Seattle mariners.

Knight's peak, a neighboring volcano, has also been stirred to spectacular efforts by the outburst of its more deadly companion, and wreaths of smoke hang over numerous peaks of the rugged Alaska peninsula.

A slight earthquake shock was experienced at Kodiak island the night of April 8, a day before the arrival of the Admiral Watson. Two days later those on the Admiral Watson had a rare view of the volcano.

Submarine Radio.

The last annual report of the bureau of standards states that members of the bureau's staff have developed very successful methods of communicating with submerged submarines by radiotelegraphy. With a single-turn coil or loop attached to the outside of the submarine, signals can be received as well when the vessel is submerged as when it is at the surface. It is also possible to transmit from a submerged submarine a distance of 12 miles. Thus it becomes possible for a ship and a submarine to exchange recognition signals. A coil aerial is a satisfactory direction finder when submerged and readily receives signals transmitted thousands of miles, just the same as when used in the air. The navy has equipped its larger submarines with this apparatus.—Scientific American.

Airmen Guide Cavalry.

While the Fourteenth cavalry was on the march recently from Fort Sam Houston, Tex., to Fort Ringgold, Tex., an aviator, who chanced to pass over their heads, acted as their volunteer guide.

The observer in the airplane saw that, instead of the Trio City road, they were following what is known as the Somerset road. He advised them of their error by a message dropped in front of the moving column, and the troop detoured to the correct road.

The air-service officers reported the incident to the chief of operations at Kelly field upon their arrival, and 25 minutes later a map showing the route to their destination, Fort Ringgold, was dropped in the middle of the marching column.

Mohammedan New Year.

The Moharram marks the beginning of the Mussulman's new year, but the date is movable, and determined by the moon. It chiefly commemorates the death of the martyrs. All the prophet's son-in-law; Hasan, his grandson (poisoned by his wife), and Hosain, the younger brother, killed at Kerbela.

Snow Leopard Rare Animal.

The snow leopard, the greatest prize of big game hunters in India, is rarely found below a height of 11,000 feet and is even there extremely rare. It is both wild and savage and the natives have a superstitious fear of its white coat and deep-green eyes.

"Flower of the Devil."

"Flower of the Devil" is a strange growth upon trees found on the sides of Fuego volcano in Guatemala, one of the few places in the world where it is known to occur. It has beautiful foliage, veining and stem, and appears full blown when just unfolding from the bud. This effect is formed by a parasite which enters the wood and dies after eating portions of it away, a process which in time produces the results described. Tradition, however, ascribes a different origin. Years ago, when the Spaniards ruled the country, a fair Indian maiden was supposed to have betrayed certain tribal secrets to her white lover. Her people threw her into the fiery water of Fuego in expiation of her sin, and once every year, on Midsummer's day, she appears to throw armfuls of the devil's flowers over the mountain's slopes—a solemn warning to all of the sanctity of tribal secrets.

Woodpecker a "Home Bird."

Among the natural guardians of the trees are the woodpeckers, which gather their food as they creep round the trunks and branches. As the food of the woodpecker is nearly as abundant in winter as in summer, they are seldom migratory. They never forage in flocks, like some of the granivorous birds whose food is more plentiful, but scatter out over wide areas, and thus better their fare. They bear the same relation to other birds that take their food from trees as snipes and woodcocks bear to thrushes and quails—that is, they bore into the wood as the snipe bores into the earth, while thrushes and quails seek their sustenance on the surface of the ground.

"Devil's Darning Needle."

The darning needle, or devil's darning needle, is one of the names given to the dragon fly, which belongs to the order Odonata. Other popular names for this insect are "snake feeders," "snake doctors," "horse stingers," "dying adders," etc., though dragon flies are harmless, as well as useful in killing mosquitoes and little flies. Young dragon flies and the young of other insects, such as many flies, while in the intermediate stage between the eggs and the mature insect, live in water and are called "nymphs." Many of them live for a year in this stage in ponds before transforming into adult dragon flies.

Knows All the News.

"Those people never read a newspaper from one year's end to the other."

"That doesn't matter; they've engaged a rascal who's lived in about every other family on the block."

Peculiar "Cradles."

An infant in Guinea is usually buried in sand up to its waist whenever the mother is busy, and this is the only cradle it ever knows. The little Lapp, on the other hand, fares most luxuriously in its mother's shoe. These Lapp shoes are big affairs of skin stuffed with soft moss and can be hung on a peg or tree branch safely out of the way. The Chinese baby is tied to the back of an older child, who goes about its play quite ignoring its burden.

Another Paradox.

A painful mistake is reported from North London. It appears that a young lady who went to a fancy dress ball as "The Silent Wife" was awarded the first prize for her clever impersonation of a telephone girl.—Punch, London.

The Wife's Birthday.

As a general thing, after a woman has been married a few years she cries when her husband forgets her birthday and rours when he advertises it.—Dallas News.

Parisian Mementoes of Napoleon.

The statue of Henri of Navarre on the Pont Neuf, the oldest bridge in Paris, is a memento of Napoleon, for it was cast from the bronze of the emperor's statue which was torn from the top of the Vendome column in 1814. This column was erected to honor the victories of the great soldier, his martial deeds being depicted in a spiral strip which covers the surface of the pillar. His figure, in the robes of a Roman emperor, has since been placed at the top. The Exchange bridge was erected by Napoleon and still bears his monogram, the arches. The famous colonnades of the Louvre district are his work. He designed them in memory of his native Corsica, where that type of architecture is common.

Overcoming Insomnia.

The treatment of insomnia or sleeplessness is a simple matter. Psychoanalysis or a physical examination discloses the real source of the disorder. Insomnia has its foundation in loss of general health, worries, bad habits, need of ventilation and sunlight. Retire early at night, even if you cannot sleep. This restores the normal habit. Take a glassful of hot milk, a few crackers and a hot bath before you retire. A cold pack to the head and a hot water bottle to the feet help to woo slumber. A triple effervescent bromide tablet or two in a glassful of water before bedtime will usually soothe the sufferer back into the land of Nod and a good eight hours of sleep.

Diamond Thieves Easily Detected.

Diamond stealing in the South African mines is becoming precarious business. The blacks still swallow them or hide them in self-inflicted wounds, but these methods no longer suffice. Coolidge X-ray tubes are so mounted in a frame as to illuminate the whole body of the stripped native standing before them. The entire body of the hundreds of miners can thus be brought into view in the fluoroscope in a few seconds, and any diamond present, even if behind thick bones, is quickly detected. The glow of the diamond under the X-rays, as well as its dense opaqueness, aids in detection, it is said.

Flying Casualties.

Revised figures from the war department show that there were but 583 casualties among American aviators in Europe during the war. Of this number 401 were among aviators with the A. E. F. and the remainder among aviators on duty with the British, French and Italian armies. The casualties are classified as follows: Killed in combat, 208; prisoners, 145; wounded in action, 192; killed in action; 41; missing in action, 29; injured in action, 25; interned, 3.

Church's History.

With much diversity of opinion on minor points, there is a general agreement in dividing the history of the church into three great periods. The first, from the birth of Christ to the time of Constantine; the second from that epoch to the Reformation, and third, from the Reformation to the present time.

War Cut Price of Diamonds.

In 1870, during the Franco-Prussian war, the value of diamonds was largely depreciated by the quantity offered for sale in London by French refugees.

Glorious Revenge.

Brother had gone to a basketball game and left little sister at home, very much to her disapproval. She began at once to lay plans for revenge, saying: "Mother, I know what I'll do. I'll just go with you to the dentist tomorrow and have a tooth pulled. I'll fix him and won't be sorry!"

SAY, you'll have a streak of smokeluck that'll put pep-in-your-smokemotor, all right, if you'll ring-in with a jimmy pipe or cigarette papers and nail some Prince Albert for packing!

Just between ourselves, you never will wise-up to high-spot-smoke-joy until you can call a pipe by its first name, *then*, to hit the peak-of-pleasure you land square on that two-fisted-man-tobacco, Prince Albert!

Well, sir, you'll be so all-fired happy you'll want to get a photograph of yourself breezing up the pike with your smokethrottle wide open! **Talk about smoke-sport! Quality makes Prince Albert so**

appealing all along the smoke line. Men who never before could smoke a pipe and men who've smoked pipes for years all testify to the delight it hands out! **P. A. can't bite or parch!** Both are cut out by our exclusive patented process!

Right now while the going's good you get out your old jimmy pipe or the papers and land on some P. A. for what ails your particular smokeappetite!

You buy Prince Albert everywhere tobacco is sold. Tossy red bags, tidy red tins, handsome pouches and half pound tins, handkerchiefs—that classy, practical, pound crystal glass humidifier with sponge moisture trap that keeps the tobacco in each perfect condition.

R. J. Reynolds Tobacco Company, Winston-Salem, N. C.